

## FY 2004 SAT Test Plan Guidance

Date:

Version Number:

### 1. Project Information

CTA or Portfolio:

CHSSI Project Number:

Project Title:

Principal Investigator:

### 2. Software Test Environment<sup>1</sup>

System	Processors to be Used for Computation	Location	Site Point of Contact
SGI Origin 2000 <sup>2</sup>	64	ARL, Aberdeen	Ron Smith, smith@arl.spot ###-###-####

### 3. SAT Test Participants and Users<sup>3</sup>

Name and Title	Organization and Position	Commercial Phone Number and E-mail Address	Purpose of Using the Software

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<sup>1</sup> List the systems to be used in the test event as shown in the example. Since the software developed under CHSSI must be ported to multiple platforms, the test plan must take this into account. **Each performance CTP must be tested and reported for all targeted platforms.** For example, if a project claims scalability on three platforms as an optimum threshold, then **every** performance CTP should be tested and reported on all three platforms.

Include the site point of contact as well as his/her email and voice telephone number.

<sup>2</sup> This is a sample line.

<sup>3</sup> List any test participants and **any primary users** of the SAT version of the software. If this list is extensive, include it as an attachment to the plan.

#### 4. Profiling Tool<sup>4</sup>

#### 5. Test Case Scenarios<sup>5</sup>

##### 5.1 Source of Baseline Data<sup>6</sup>

##### 5.2 Expected Results<sup>7</sup>

#### 6. Testing

##### 6.1 Critical Technical Parameters<sup>8</sup>

CTP Title	Parameters		CTP-Specific Detail <sup>9</sup>
	Optimum Objectives	Minimum Threshold	
10			

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<sup>4</sup> List the tool which will be used to profile the code and why it was selected.

<sup>5</sup> Describe the computational problems for the SAT test event that will be solved using this software. Provide detailed information so that personnel not involved in the field may understand. Explain how the scenario or test case will demonstrate the software's capabilities and why the particular test case or scenario was selected.

<sup>6</sup> Explain whether the SAT is being used to document starting point performance or whether baselines have already been established. If baselines have already been established, identify the source of the baseline data (non-scalable legacy software, analytical solution, etc.).

<sup>7</sup> Specify the expected computational solution as well as the acceptable error (variance) factor. Explain why the variance is acceptable.

<sup>8</sup> Identify the Critical Technical Parameter Titles and Parameters (both optimum and minimum threshold) that will be evaluated during SAT test. These are contained within the latest approved Software Development Plan.

<sup>9</sup> Describe **all** specific methods, requirements, assumptions, constraints or considerations of particular relevance to the CTP. It is critical that this section contain as much information as necessary to fully explain the characteristics of the CTP, test cases and scenarios, and other information pertinent to understanding the test process and the results. Blank, "None", "Not Applicable" or other words to that effect should NOT be used for this section.

<sup>10</sup> Insert a row for each CTP being tested at the SAT test event.

## **6.2 Methods to Obtain Metrics<sup>11</sup>**

## **6.3 Special Requirements<sup>12</sup>**

## **6.4 Assumptions and Constraints<sup>13</sup>**

## **6.5 Special Considerations<sup>14</sup>**

## **7. Reporting<sup>15</sup>**

## **8. Decision Authority<sup>16</sup>**

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<sup>11</sup> Identify the method(s) to qualify and quantify the test values/results. The test values and ensuing results must be documented for each platform used in the test event. The results must be provided in an MS Excel workbook, along with the CTA/Portfolio Leader's test report. Column headings shall include the type of platform (e.g., Origin 2000, IBM-SP, Cray T3E, etc.).

<sup>12</sup> Specify any special requirements (for example, 48 hours of continuous facility time, weapon simulation, extent of test, use of a special input or database).

<sup>13</sup> Describe any assumptions and constraints, such as anticipated limitations on the test due to system or test conditions, timing, interfaces, equipment, personnel, database, etc.

<sup>14</sup> Identify all safety, security, and privacy considerations associated with the test and the methodology used to mitigate them.

<sup>15</sup> Specify how the results of the testing will be documented. Recommend citing the SAT Test Report.

<sup>16</sup> Use the standard verbiage: "The results of the SAT test event and the resultant CTA/Portfolio Leader's decision will be documented in the test report and sent to the Project Manager for Software Applications Support."